

REMARKS

Claims 11-18 are pending in this application. Of these pending claims, Claims 11-18 stand rejected. By way of this paper, Claims 11 and 17 have been amended; and Claims 14-16 and 18 have been cancelled.

The foregoing amendments and following remarks are believed to be fully responsive to the outstanding office action, and are believed to place the application in condition for allowance.

Claim Rejections – 35 U.S.C. § 112, second paragraph

Claims 11-18 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Applicant has amended the Specification as Filed to include the term “sacrificial.” Applicant believes that no new matter has been added with these amendments since the Application describes the controlled-release layer as a layer that readily dissolves or parts in order to separate the mandrel from the base (See Paragraphs [0015] and [0018]). Applicants amendment to the Specification is a clarification to support the terminology in the amended Claims 11 and 17. The sacrificial nature of controlled-release layer is also evident in Figure 1 and Figure 2H of Application as filed.

As such, Applicants respectfully request reconsideration and withdrawal of the 35 U.S.C. §112, second paragraph, rejections of Claims 11-18.

Claim Rejections – 35 U.S.C. § 102 or 35 U.S.C. § 103

Claims 11-18 stand rejected under 35 U.S.C. §102(b) as being anticipated by the Hulderman reference (US Patent Number 5,545,511) or, alternatively, stand rejected under 35 U.S.C. §103(a) as being obvious over the Hulderman reference.

Applicant has amended Claims 11 and 17 to clarify that the formed electroformed structure is for use in an ink jet printhead (See Paragraph [0018] of the Specification as Filed). Further, Applicant has amended Claims 11 and 17 to clarify that the sacrificial controlled-release layer is made of an organic layer or a brittle layer that allows the easy removal of the electroformed structure from the release layer.

Applicants submit that the Hulderman reference discloses a millimeter wave device with wave circuit patterns. The Hulderman reference teaches a photoresist layer and a thermal layer, wherein the photoresist layer is removed after the formation of the metal layer (See Sheet 7-9, Figures 12A – 12H, 13A- 13D, and 14A – 14G of '511). The final photoresist layer attached to the electroformed housing is removed using a hot resist stripper (Column 13, Lines 31-38; and Column 15, Lines 39-40). The Hulderman reference only teaches using organic solvents to remove the photoresist layer that is exposed to the UV light before the electroplating is added (Column 16, Lines 22-28).

Applicant's mandrel utilizes a sacrificial controlled-release layer that is either organic or brittle to allow the electroformed structure to be soaked in a organic solution to separate the electroformed structure from the release layer. This novel aspect of the Applicant's mandrel allows the electroformed layer to be released easier because the Hulderman reference requires a hot resist stripping step accompanied by agitation or brushing to remove the release layer (Column 15; Lines 36-43). The removal of the release layer in the Hulderman reference can damage the formed structure. Applicant's mandrel avoids this problem.

Applicants respectfully submit that the prior art cited above does not disclose, teach, suggest, or contemplate this feature whatsoever. As such, Applicants respectfully submit that the present invention is patentably distinct over the prior art cited above. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §102 and 35 U.S.C. §103 rejections of Claims 11-13 and 17 is respectfully requested.

Claims 11-16 stand rejected under 35 U.S.C. §103(a) as being obvious over the Lam reference (US Patent Number 4,773,971).

Applicants submit that the Lam reference's reusable mandrel has a glass substrate with a conductive film layer and dielectric layer. The Lam reference does not teach how the photoresist layer is removed from the formed structure (Column 3, Lines 55-58; Column 4, Lines 47-49). The Lam reference does not teach the novel use of a sacrificial controlled-release layer made of an organic layer or a brittle layer that easily removes the electroformed structure from the release layer without damage to the electroformed structure.

Applicants respectfully submit that the prior art cited above does not disclose, teach, suggest, or contemplate this feature whatsoever. As such,

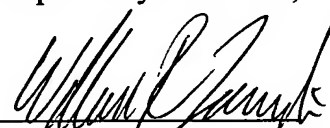
Applicants respectfully submit that the present invention is patentably distinct over the prior art cited above. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103 rejections of Claims 11-13 and 17 is respectfully requested.

CONCLUSION

It is respectfully submitted that, in view of the above amendments and remarks, this application, with currently pending claims 11-13 and 17 is now in condition for allowance, prompt notice of which is earnestly solicited.

The Examiner is invited to call the undersigned in the event that a phone interview will expedite prosecution of this application towards allowance.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.